S/N 08/631,650   PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	DOBBEK, J.	Examiner:	Lao, S.
Serial No.:	08/631,650	Group Art Unit:	2151
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Title:	APPARATUS AND METHOD FOR DOWNLOADING DATA TO ELECTRONIC DEVICE		

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The undersigned hereby certifies that this Transmittal Letter and the paper or fee, as described herein, are being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 CFR 1.10 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

                By: _____
                      Kari Arnold

PRELIMINARY AMENDMENT

Box Patent Application
Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Kindly amend the above-identified continuing patent application prior to examination and consideration as follows below.

IN THE CLAIMS

Please cancel claims 1-41 and add new claims 42-53 as follows below.

Calculation of filing fee needs to be calculated after cancellation of claims 1-41.

1   42.   (New) An electronic device having a device type that is one of a plurality

2   of device types, the device comprising:

3   (a)   non-volatile memory means for storing operational data utilized during

4   operation of the electronic device;

5   (b)   receiver means for receiving a data object externally from the electronic

6   device, the data object including data associated with a plurality of device types;

7   (c)   installation means for installing in the memory means only data from the

8   data object that is associated with the device type of the electronic device and retrieving

9   from the data object an installation routine, wherein the installation routine is provided

10   with pointers to utilities resident on the electronic device for executing the installation

11   routine; and

12   (d)   download processing means having a download processing routing, the

13   download processing routine executing the installation routine to store into the non-

14   volatile memory means of the electronic device only the data associated with the

15   indicated device types.

1   43.   (New) The electronic device of claim 42, wherein the data in the data

2   object is selected from the group consisting of program code, device parameters, and

3   combinations thereof.

1   44.   (New) The electronic device of claim 42, wherein the plurality of device

2   types represent different electronic products having different functionality but which

3   share an identical hardware platform.

1   45.   (New) The electronic device of claim 42, wherein the electronic device is

2   a disk drive including the data buffer for temporarily storing the data object, wherein the

3   installation means comprises a controller.

1 46. (New) A disk drive, comprising:

2 (a) a data buffer for receiving a download entity, the download entity including

3 data in a device type table associated with a device type for each of a plurality of types

4 of disk drives;

5 (b) a non-volatile memory for storing operational data associated with the disk

6 drive; and

7 (c) a controller, coupled to the data buffer, the controller

8 (1) determining a type for the disk drive,

9 (2) retrieving from the download entity only the data associated with the

10 determined type for the disk drive, the retrieving further comprising:

11 (i) retrieving from the download entity an installation routine,

12 wherein the installation routine is provided with pointers to utilities resident on the

13 electronic device for executing the installation routine; and

14 (ii) executing the installation routine by the electronic device to

15 build a data image in the data image block of the download entity from the data in the

16 device type table that is associated with the determined type for the disk drive and to

17 store into non-volatile memory of the electronic device only the data associated with the

18 indicated device type;

19 wherein retrieving and executing are performed at least in part by a

20 download processing routine resident in the electronic device,

21 (3) storing the data associated with the determined type for the disk drive

22 in the non-volatile memory, and

23 (4) resetting the data buffer to clear the data buffer.

1   47.   (New) The disk drive of claim 46, wherein the data in the download entity

2 is selected from the group consisting of program code, device parameters, and

3 combinations thereof.

1   48.   (New) The disk drive of claim 46, wherein the disk drive further comprises

2 a second controller, coupled to the first controller, the second controller having a

3 random access memory for storing servo parameters from the download entity that

4 characterize the disk drive.

1   49.   (New) An apparatus, comprising:

2   (a)   an array of direct access storage devices, each of which having a device

3 type and a non-volatile memory for storing operational data utilized in the operation

4 thereof; and

5   (b)   an array controller controlling the array of direct access storage devices,

6 the array controller providing a generic download entity to a data buffer of a plurality of

7 the direct access storage devices to update the memories thereof, the generic

8 download entity including in a device type table operational data associated with a

9 device type for each of a plurality of device types;

10   wherein each direct access storage device having a device controller, the device

11 controller stores in the non-volatile memory of each of the plurality of direct access

12 storage devices only operational data from the download entity that is associated with a

13 respective device type for a direct access storage device and discards the operational

14 data not associated with a respective device type for a direct access storage device,

15 the device controller storing only operational data from the download entity that is

16 associated with a respective device type for a direct access storage device by

17 determining a type for the direct access storage device, retrieving from the generic

18 download entity an installation routine, wherein the installation routine is provided with

19 pointers to utilities for executing the installation routine, the device controller executing

20 the installation routine to build a data image in the data image block of the download

21 entity from the data in the device type table that is associated with the determined type

22 for the direct access storage device and to store into non-volatile memory of the direct

23 access storage device only the data associated with the indicated device type, wherein

24   retrieving and executing are performed at least in part by a download processing

25   routine resident in the direct access storage device and wherein the device controller

26   resets the data buffer to clear the data buffer.

1   50.   (New) The apparatus of claim 49, wherein the operational data in the

2   download entity is selected from the group consisting of program code, device

3   parameters, and combinations thereof.

1   51.   (New) The apparatus of claim 49, wherein the download entity includes an

2   installation routine, wherein each of the plurality of direct access storage devices

3   executes the installation routine to store in the non-volatile memory only the operational

4   data in the data buffer that is associated with its respective device type.

1   52.   (New) A download entity for downloading to an electronic device having a

2   device type that is one of a plurality of device types, the download entity comprising:

3   (a)   a block of data, the data block having portions in a device type table

4   associated with each of the plurality of device types; and

5   (b)   an installation routine, executed by the electronic device, the installation

6   routine retrieving only the portion of the data in the download entity that is associated

7   with the device type of the electronic device and discarding the data in the download

8   entity not associated with the device type of the electronic device, wherein the

9   installation routine being provided with pointers to utilities resident on the electronic

10   device for executing the installation routine, wherein retrieving and executing are

11   performed at least in part by a download processing routine resident in the electronic

12   device, the download processing routine executing the installation routine to build a

13   data image from data in the device type table that is associated with a determined type

14   for the electronic device and to store into non-volatile memory of the electronic device

15   only the data associated with the indicated device type.

1   53.   (New) A program storage device readable by an electronic device, the

2   program storage device tangibly embodying the download entity of claim 52.

REMARKS

Kindly amend the above-identified continuing patent application prior to examination and reconsideration. It is believed that the amendments clarify the patentable invention without adding new subject matter. Claims 41-53 are pending in the application. The Applicant believes that the changes to the claims do not involve any new matter or objectionable changes. Reexamination and reconsideration of the application in view of the above amendments and following remarks is requested.
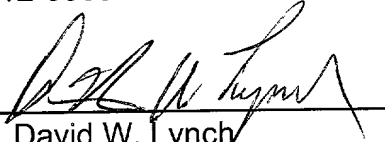
A copy of the Petition for Extension of Time is enclosed, for your convenience, from the parent case.

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

Respectfully submitted,

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